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ONCOLOGY COMPASS
Digest

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FEATURE STORY

PREVENTION IN FOCUS

MYSKINCHECK CAMPAIGN HIGHLIGHTS SKIN HEALTH AND MELANOMA AWARENESS

EXPERT INTERVIEW

EARLY DETECTION REIMAGINED

Breast cancer care revolution

LOBBYING FOR CHANGE

FIGHTING THE GOOD FIGHT

Nineteen years of tireless colorectal cancer advocacy

ONCOLOGY BREAKTHROUGHS

UPDATES FROM THE FOOD & DRUG ADMINISTRATION

FDA grants accelerated approval to lifileucel: first TIL therapy for advanced melanoma

3D structure of a melanoma cell, photo credit: National Cancer Institute

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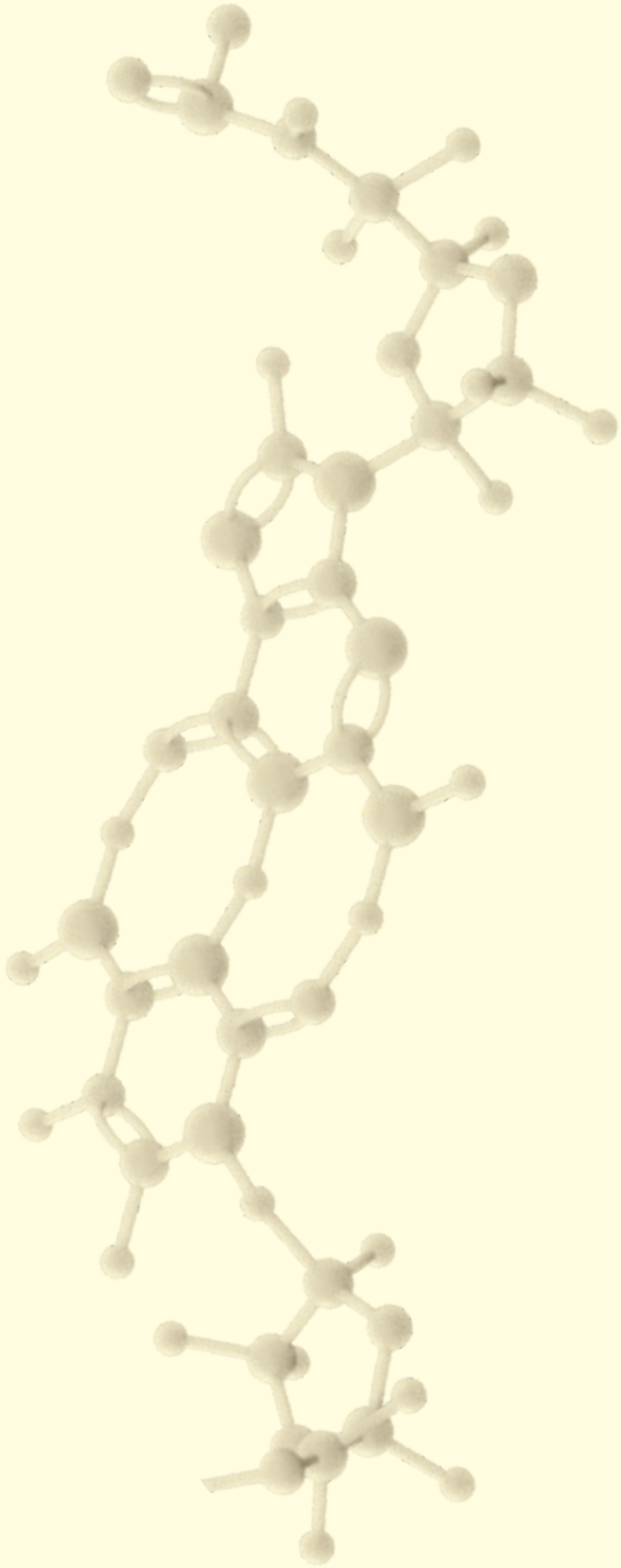
TABLE OF CONTENTS



PREVENTION IN FOCUS

MYSKINCHECK CAMPAIGN HIGHLIGHTS SKIN HEALTH AND MELANOMA AWARENESS

BY ANNE JÄKEL

On June 11 and 12, 2024, a Melanoma Awareness Campaign took place at Place de la Riponne in Lausanne, organized by derma2go and supported by well-known partners such as the Lausanne University Hospital (CHUV), the Swiss Society for Dermatology and Venereology (SGDV), the Association for Skin Cancer Research, La Roche-Posay and Merck Sharp & Dohme (MSD) Switzerland. The goal of this campaign was to educate the public about the importance of skin cancer prevention and to provide mole checks. Dr. Christian Greis, Founder and Medical Director of derma2go, and Prof. Olivier Gaide personally carried out these examinations and informed passers-by about skin cancer prevention and skin protection. The initiative emphasized the central role of prevention in order to detect and prevent the development of melanoma at an early stage. In addition to the on-site checks, there were also online birthmark checks from derma2go offered to reach a broader audience and promote awareness of skin health. Oncology Compass Digest had the opportunity to speak with Dr. Christian Greis to talk about the event and find out more about the background and successes of the Melanoma Awareness Campaign.

Mole checks in Lausanne, photo credit: derma2go

Dr. Greis, could you briefly tell us how the idea for the Melanoma Awareness Campaign came about and what goals you are pursuing with it?

The idea for the MySkincheck campaign came about many years ago under the patronage of Prof. Dr. Dummer out of the need to raise awareness of the early detection of black skin cancer and to inform people about the risks of skin cancer. The campaign aims to encourage people to check their moles regularly and, if suspected, to see a dermatologist early to increase the chances of successful treatment.

What was it like working with partners, such as the CHUV, SGDV, La Roche-Posay and MSD Switzerland? What role did these organizations play in the campaign and how did they contribute?
The collaboration with the partners mentioned and the Association for Skin Cancer Research has significantly strengthened the campaign.

These organizations have brought their expertise, resources and networks to increase the reach and effectiveness of the campaign. We are very pleased to have such strong partners at our side who support us.

Why is melanoma prevention so important, and what role do regular mole checks play in this?

Prevention of melanoma is crucial because melanoma is the most dangerous form of skin cancer. They develop from the pigment-producing cells of the skin and can spread early to other parts of the body, making treatment difficult. Regular mole checks play a central role in prevention as they help to detect suspicious skin changes at an early stage. Through self-examination and dermatological checks, conspicuous moles can be identified and, if necessary, removed in a timely manner. This significantly increases the chances of recovery and reduces the risk of the cancer spreading to other organs. Early detection is the key to successful treatment and can save lives.

My Skincheck campaign team, photo credit: derma2go

The MySkincheck campaign therefore aims to raise awareness of the importance of these preventative measures and encourage people to check their skin regularly and to see a dermatologist if there are any changes.

Could you tell us more about the mole checks carried out at Place de la Riponne in Lausanne? What was the response from passers-by to this initiative?

We organized mole checks at Place de la Riponne in Lausanne to raise awareness of skin cancer prevention. This took place on June 11th and 12th in a specially designed cube.

Dermatologists were available on site to examine and advise passers-by free of charge. The response was very positive, many people took the opportunity to find out about skin cancer and have their birthmarks checked.

How were passers-by informed about skin cancer prevention and skin protection, and what information materials or methods did you use?
In the run-up to the event, we communicated about the free birthmark checks via various internet platforms and on the radio. At the campaign stand itself there were information materials about self-checking using the ABCD(E) rule as well as sunscreen samples.

The doctors then provided those interested in taking part with comprehensive information about the topic of prevention and examined moles that were shown.

How did the option of online mole checks work and what advantages do you see in this hybrid approach?

The opportunity of online birthmark checks by derma2go has made it possible for people to have their skin changes assessed by dermatologists from the comfort of their own home. All you had to do was upload a photo of the birthmark and answer a short medical questionnaire.

Those affected received feedback within a few hours. This hybrid approach combines the advantages of personal advice and digital technology. Benefits include increased accessibility to specialists, quicker assessments and reductions in inhibitions about seeing a doctor. The online platform can reach more people and improve early detection of skin cancer.

Conspicuous birthmarks can be identified digitally and the affected patients receive feedback about visiting a local dermatologist to have the birthmark removed if necessary. If the findings were unclear, a low-threshold on-site presentation was possible.

What challenges did you experience while running the campaign, especially organizing the on-site checks and the online platform?

Not everyone is aware of the option of getting advice from dermatologists online. Therefore, it is even more important to popularize this type of communication and make people aware of its benefits (no waiting times for appointments, response within hours, availability of specific experts for all types of skin diseases).

A combination of online and on-site is actually perfect for providing patients with optimal care. We had, for example, participants in the

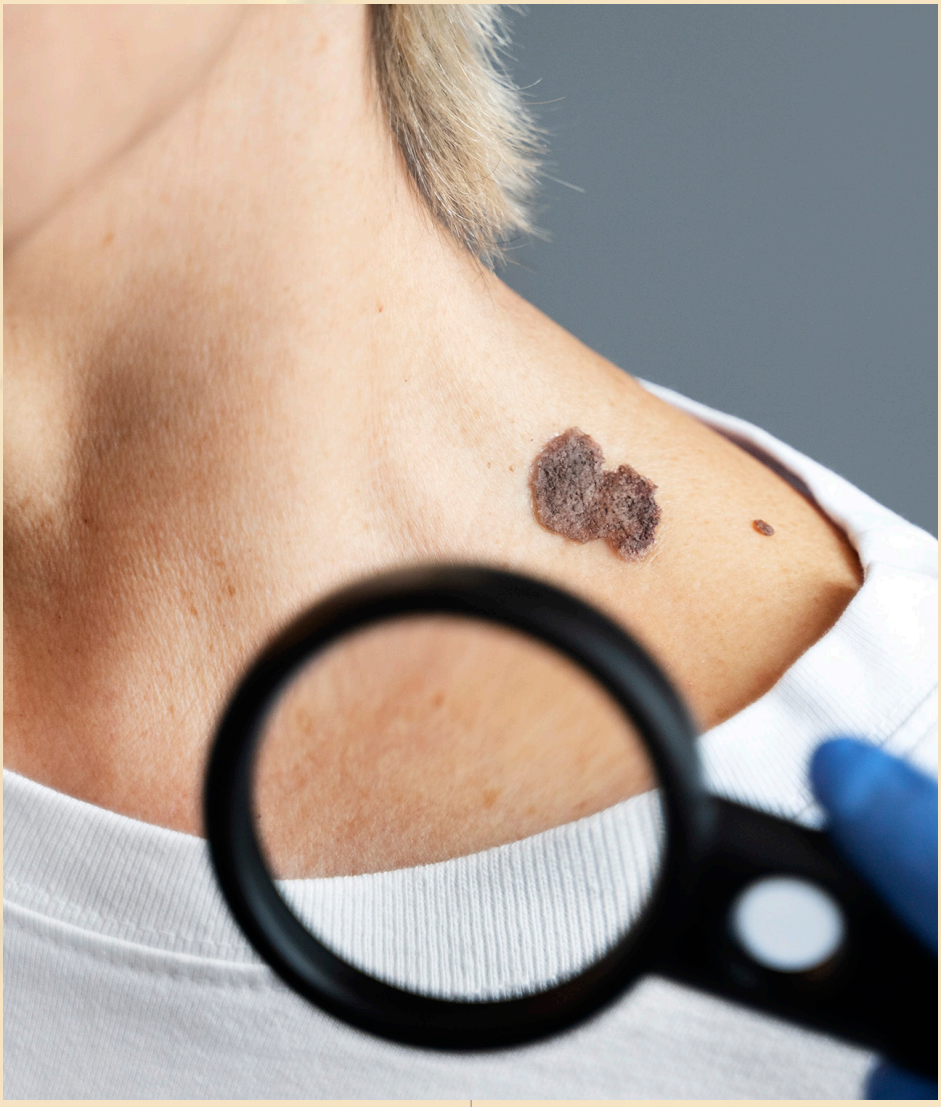


Photo credit: Freepik

campaign who we had advised online and where an on-site consultation was recommended, who then were invited to Lausanne. We organized the same thing in German-speaking Switzerland in Zurich: here we used the Amavita Bahnhof Pharmacy to offer on-site checks for the MySkincheck campaign.

Are there any specific cases or stories from the campaign that stand out in your mind that illustrate the importance of skin cancer prevention?

Yes, the participating dermatologists actually repeatedly detected melanomas and white skin cancer during the campaign and immediately sent people to local colleagues for further treatment.

In Lausanne, this was done by the CHUV. It is important not to waste any time and to treat the relevant area of skin quickly. Those affected were very grateful that we were able to help so well with our offer.

How do you plan to measure the success of this campaign and what steps will be taken to continue and expand prevention work in the future?

The success of the campaign is on two levels: on the one hand, of course, we have results about how many people have dealt with the topic of skin cancer and prevention, how many of them have found information on our website and also how many have ultimately done so online or attended an on-site consultation. This

campaign was not the first that we have organized on the topic of skin cancer and we see that the interest and need for this topic remains high. The second level of success lies in the fact that we inform everyone who is interested about how they can check moles themselves so that they can notice changes in themselves as quickly as possible and then take action. And of course, that awareness of thorough skin protection is extremely important in order to avoid skin changes. Not just in the outdoor swimming pool, but always in everyday life.

What message would you like to pass on to oncologists as they educate their patients about the importance of skin cancer screening and regular mole checks?

Skin cancer is a type of cancer that can be diagnosed early because the changes in the skin are visible. It is therefore important to advise patients to check themselves regularly and, if necessary, to go to a dermatologist. It is also important to emphasize the importance of sunscreen, which you should apply daily, for example on the face, neck or other exposed skin areas.

Photo credit: Freepik

Important support from MSD and La Roche-Posay: Prevention and education at the Melanoma Awareness Campaign

MSD Switzerland and La Roche-Posay were important sponsors of the derma2go organized Melanoma Awareness Campaign.

Their support provided important educational materials highlighting the high risks of stage IIB/C melanoma. These materials were designed specifically for physicians and patients and showcased why early treatment of high-risk melanoma is critical.

A central theme of the materials was the high recurrence rate for stage IIB and IIC melanomas. It was highlighted that the risk of recurrence after surgery is significant, with the cancer returning either in the same location or elsewhere in the body. This can occur rapidly and often as metastatic melanoma, which can significantly impact patients' survival prospects. At the event, these materials were distributed to raise awareness of the need for better self-protection measures against the sun.

Many people underestimate the high risk of stage IIB/C Melanoma, which is why a "watch and wait" approach is still often followed in Switzerland. People need to understand that they would have to protect themselves much better from the sun, and there are already many measures they can take. The high level of public participation and interest in the on-site mole checks underlined the importance of these preventative measures.

The contributions of MSD and La Roche-Posay were not just financial; as sponsors of the campaign, they provided targeted and insightful information material, creating significant added value for the campaign and positively impacting the health of the population.

FIGHTING THE GOOD FIGHT

NINETEEN YEARS OF TIRELESS COLORECTAL CANCER ADVOCACY

BY MARIJA GEIST

Fight Colorectal Cancer is a leading national patient empowerment and advocacy organization in the United States dedicated to serving the colorectal cancer community. Since its founding in 2005, the organization has been committed to improving access to health information, enhancing screening procedures, and securing increased funding for colorectal cancer research. Oncology Compass spoke with Molly McDonnell, Vice President of Advocacy, to learn more about their ongoing efforts to drive change.

Photo credit: Molly McDonnell, photo courtesy of Molly McDonnell

Can you describe the work you do in the field of colorectal cancer?

Our mission is to develop and share medically reviewed information on all aspects of cancer treatment and the patient journey.

We provide resources for individuals who need colorectal cancer screening as well as for those already diagnosed. Whether patients are considering treatment options, managing side effects, or transitioning into survivorship, we offer comprehensive support through digital and print materials, webinars, and a strong focus on research.

We see ourselves as a convener, bringing together the leading minds in colorectal cancer to reach a consensus and create strategic plans for advancing research. We continually assess the gaps, opportunities, and areas where our efforts and funding can make the greatest impact.

That's remarkable. And what's the focus of your advocacy efforts?

We actively engage at both state and federal levels to influence policies that impact patient care, particularly in ensuring patient access to colorectal cancer screening.

In the colorectal cancer space, we are fortunate to have a wide range of effective and safe screening tools available. This diversity in screening modalities allows patients to choose the option that best suits their needs.

However, it is essential that cost does not become a barrier to these choices. To this end, we have worked diligently to make colorectal cancer screening accessible and affordable for all patients.

Our efforts also extend to advocating for increased research funding at the federal level, which remains a critical priority in the fight against colorectal cancer.

Additionally, we are committed to empowering and educating patients,

caregivers, and their loved ones about the developments at state and federal levels, and the opportunities available for them to engage in advocacy.

We help individuals harness their personal experiences to drive meaningful change, transforming their pain into purpose.

By sharing their stories, they can humanize the statistics and bring a personal dimension to the discussions lawmakers have on this issue, ultimately influencing policy change.

Do you believe colorectal cancer is neglected at the federal level?

Colorectal cancer is often neglected and underfunded by the federal government, despite being the second leading cause of cancer-related death for men and women combined.

Alarmingly, there is a growing number of diagnoses among individuals under the age of 50, and we lack a clear understanding of why this is happening. Yet, despite these troubling statistics and the fact that colorectal cancer remains one of the deadliest cancers, it receives significantly less funding than several other types of cancer.

We believe it is crucial to highlight this disparity. While we do not wish to diminish the progress made in breast and lung cancer research, for example, we advocate for colorectal cancer to receive the same level of attention and resources.

This cancer is often burdened by stigma, which has kept it in the shadows compared to other cancers.

We are committed to raising awareness and encouraging open conversations about colorectal cancer to ensure it receives the attention, understanding, and funding it deserves.

How long has your organization been engaged in this work?

Next year marks our 20th anniversary as an organization, and advocacy has been central to our mission from the very beginning. One of our signature initiatives is our annual advocacy event in Washington, D.C., known as Call on Congress.

Each year, we bring over 200 patients and caregivers from across the country to Washington, D.C., to meet with their members of Congress. This year will be our 18th Call on Congress, a testament to our nearly two decades of commitment to this cause.

Advocating for better care for colorectal cancer remains a core priority for our organization, and we will continue to fight tirelessly to ensure progress is made.

Can you share some of the successes your organization has achieved so far?

In 2019, we launched our state advocacy program, partnering with coalitions at the state level to advance legislation aimed at increasing access to colorectal cancer screening.

A key focus of this program has been ensuring that individuals who undergo a non-invasive colorectal cancer screening test and receive an abnormal result have access to a follow-up colonoscopy, which is necessary to confirm a diagnosis.

A non-invasive test result alone does not constitute a diagnosis; completing the screening process requires a follow-up colonoscopy. However, many patients were facing significant out-of-pocket costs for these necessary colonoscopies, even though the initial non-invasive tests were covered by insurance. This created a significant barrier to effective screening, as the non-invasive tests are not beneficial without the subsequent colonoscopy.

We successfully advocated at the state level to pass legislation in several states to eliminate out-of-pocket costs for patients needing a colonoscopy after an abnormal non-invasive test. Building on this success, we expanded our efforts to the federal level. In 2022, we advocated for the federal government to issue guidelines requiring commercial insurers to eliminate out-of-pocket costs for follow-up colonoscopies.

Shortly thereafter, the Centers for Medicare and Medicaid Services issued similar guidance, ensuring that Medicare beneficiaries would also have these costs covered.

These were significant victories for our organization, helping to improve access to colorectal cancer screening and allowing patients to fully benefit from the range of screening tools available to address this disease.

What's that huge advocacy point, or big item you'd like to tackle next?

One of our top priorities this year is advocating for increased federal funding for colorectal cancer research. In the near future, our representatives will be in Washington, D.C., advocating for the establishment of a dedicated colorectal cancer research program within the Department of Defense (DoD).

The DoD operates a Congressionally Directed Medical Research Program (CDMRP), which is lesser known for its involvement in medical research.

This program supports innovative, high-risk, high-reward research that may not receive funding through other channels.

Currently, there are several disease-specific research programs within the CDMRP, but colorectal cancer remains the only one of the top five cancer killers in the United States without a dedicated research program. We are advocating for the creation of such a program to ensure a dedicated funding stream and a strategic approach to colorectal cancer research.

This initiative is especially important as we seek to understand why increasing numbers of young people

are being diagnosed with colorectal cancer and to develop more effective treatment options for those already affected.

So far, what has your greatest challenge been?

One of the greatest challenges we face is overcoming the stigma associated with colorectal cancer, largely due to its connection with a sensitive part of the body and its relation to bowel movements.

This discomfort often prevents open discussions about the disease, limiting the attention it receives.

While public awareness is gradually improving, there is still much work to be done to ensure more people understand the significance and impact of colorectal cancer.

Additionally, the current political environment in Washington, D.C. presents its own set of challenges, with frequent gridlock in Congress and a high level of partisan conflict.

Navigating this landscape can make it difficult to achieve legislative progress.

However, we firmly believe that cancer advocacy, including for colorectal cancer, transcends political divisions.

Cancer does not discriminate by political affiliation, race, ethnicity, or gender. It is an issue that affects everyone, and we see it as an area where members of both parties can unite and collaborate to make meaningful progress.

And what would you like to say to potential supporters, donors, and partners out there?

We warmly invite anyone to join us in our advocacy efforts. We strive to make it easy for people to get involved, particularly for patients and caregivers.

We understand that engaging in policy work can sometimes feel intimidating, but the most important contribution is sharing your personal story. The voices of patients and caregivers are incredibly powerful, and they are essential to our advocacy on Capitol Hill.

At the core of our mission is the belief that patients and caregivers deserve a seat at the table where policy decisions are being made - decisions that directly impact their lives. Your experiences and perspectives are invaluable in shaping these policies, and your voice deserves to be heard.

We encourage anyone, even those who may feel hesitant or unsure, to join us. Your participation can make a significant impact, and we are here to support you every step of the way.

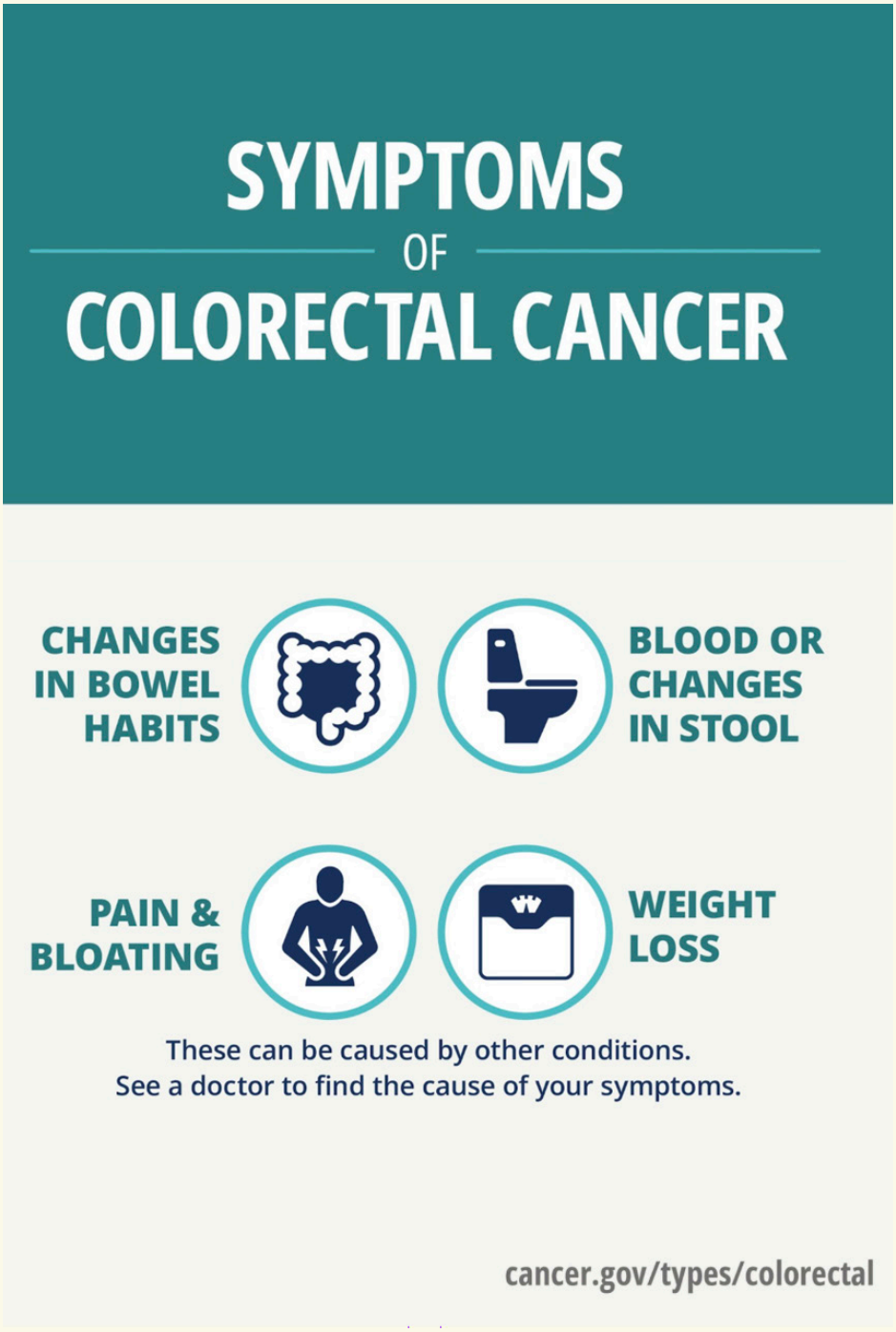


Photo credit: National Cancer Institute

EARLY DETECTION REIMAGINED

BREAST CANCER CARE REVOLUTION

BY NSISONG ASANGA

Breast cancer is a global problem of massive scale. In 2022, 2.3 million women were diagnosed, and 670,000 died from the disease. It can strike at any age after puberty, but the risk goes up as women get older. Where women live also plays a role - women in developed countries are more likely to get breast cancer, but those in less developed nations are more likely to die from it.[1]

Photo credit: Ritse M. Mann, MD, PhD, photo courtesy of Ritse M. Mann, MD, PhD

Breast cancer develops through stages that are not entirely understood, from its initial emergence to when it becomes noticeable as tumors.[2]

The variety in the types of breast cancers is extensive, with some tending to spread to other parts of the body quickly, while others may remain inactive for a time before beginning to spread.[1]

Despite considerable progress in understanding breast cancer, accurately predicting the characteristics and behavior of these cancers remains a challenge, especially when comparing cancers that arise sporadically with those that are inherited.[2]

Early detection is fundamental

Catching breast cancer early is crucial because it significantly improves the chances of a better outcome.

Thanks to advancements in treatment options, there's now a lower risk of breast cancer returning in a more aggressive form elsewhere in the body.

Studies suggest combining early detection with a comprehensive treatment approach significantly improves patient outcomes.[2]

Over the years, the categorization of breast cancer into different subtypes has opened the door to more personalized treatment options, allowing for both more aggressive and more conservative treatment plans based on the specifics of cancer detected early on.[2]

Nevertheless, half of all breast cancers happen in women with no known risk factors, except being female and over 40.

Family history does raise the risk, but most women with breast cancer do not have a family history of it, which increases the urgency of enhancing screening tools' effectiveness.[1]

A new breast cancer screening paradigm is needed

Ritse M. Mann, MD, PhD, is a radiologist committed to optimizing breast cancer patient care.

As a member of the executive board of the European Society of Breast Imaging (EUSOBI) and chair of its scientific committee, he is a leading force shaping the field.

Dr. Mann chairs the working group diagnostics of the Breast Cancer Research Group (BOOG) and serves as the section editor for women's imaging at the European Journal of Radiology (EJR).

Dr. Mann recently discussed his study, "Challenges and Changes of the Breast Cancer Screening Paradigm," with Oncology Compass regarding the institutional challenges needed to transform early breast cancer detection.[3]

What are the current limitations of breast cancer screening?

Breast cancer screening is very much a one-size-fits-all approach.

Apart from some specific MRI-based screening programs for women at extremely elevated risk, screening is purely mammography-based, and screening intervals are dependent on where you live, not on what would be good for you.

We currently do not actively search for women at increased risk nor suggest that women at lower risk could be screened less frequently.

This limits, on the one hand, the effectiveness of screening and, on the other hand, places a burden on women for whom the benefit is minor.

What challenges must be addressed to transition to a more effective system?

Unfortunately, transitioning to a diverse system is not easy.

Most screening organizations are cost-driven and resistant to change, specifically when this requires substantial initial investments.

Actively searching for high-risk women requires addressing the entire female population at a relatively early age.

Subsequently, considering their personal risk, women need to be much better informed about the benefits and potential harms of different screening techniques and frequencies.

What are the potential benefits of tackling the limitations of breast cancer screening?

Screening can become much more effective if we tackle these institutional and operational hurdles. It might, basically, prevent breast cancer mortality in specific subgroups.

I guess the massive scope of screening and the substantial potential benefit explains why the topic is so broadly discussed in academic and government circles.

How does early cancer detection impact treatment?

Early cancer detection simply allows early cancer treatment. However, we need to redefine 'early cancer' as cancer that is unlikely to lead to mortality.

In breast cancer, the current definition of early cancer is "not locally advanced or metastatic," which comes from old treatment paradigms and means that surgery is possible.

However, it unfortunately includes many women who require extensive treatment and will still die from the disease.

What should be the optimal goal for breast cancer screening?

The optimal goal would be to find all cancers when they are T1N0 (i.e., smaller than 2 cm and node negative), as at that time, treatment is usually curative, and most women will not die from the disease.

How can early detection of breast cancer impact healthcare costs, and what is the research focus in screening and risk stratification?

In many cases, such early detection may prevent the need for expensive therapy and, consequently, reduce overall healthcare costs.

Research in screening and risk stratification is thus aimed at developing tools and schemes that can ensure that most cancers are detected when they can be cured most easily.

We must acknowledge, however, that even while we already have tools and schemes that are much better than one-size-fits-all mammography, there is a lot of room for further improvement.

What would be the consequences of putting research in screening and risk stratification on hold, and why is early detection crucial for helping women?

Evidently, putting research in screening and risk stratification on hold would mean we accept that the current standard is good enough.

This means we will have to put a lot of effort into the development of more effective treatments, as currently, too many women are still dying from breast cancer.

Unfortunately, the more effective therapies are presently driving up healthcare costs, often at a marginal gain in survival.

Consequently, early detection seems vital to genuinely changing the outcome for many women worldwide.

UPDATES FROM THE FOOD & DRUG ADMINISTRATION

FDA GRANTS ACCELERATED APPROVAL TO LIFILEUCEL: FIRST TIL THERAPY FOR ADVANCED MELANOMA

BY KRISTINA OLUJIĆ MILOŠEVIĆ

The FDA has granted accelerated approval for lifileucel, an autologous T-cell immunotherapy derived from tumors, for patients with advanced melanoma who have not responded to prior immunotherapies or targeted therapies. The phase II C-144-01 trial demonstrated that lifileucel provided a significant and durable tumor response without causing the common serious immune-related side effects (irAEs).[1-3]

Photo credit: Freepik

Researchers at the National Cancer Institute (NCI), led by Dr. Steven Rosenberg, were pioneers of tumor-infiltrating lymphocyte (TIL) therapy. Their early clinical trials in the 1980s showed the potential of TIL therapy in reducing tumors in advanced melanoma. Over the years, the NCI team refined the process of generating and delivering TIL treatment, ultimately leading to the FDA approval of the first cancer TIL therapy.[1]

Lifileucel is the first cancer treatment to utilize tumor-infiltrating lymphocytes (TILs) and the first approved cellular therapy for a solid tumor. Lymphocytes, which include T and B cells, are key components of the immune system, tasked with detecting and eliminating abnormal cells such as those found in cancer.

As tumors grow, lymphocytes infiltrate the tumor, becoming TILs, which then target and attack cancer cells. Since these TILs originate from the tumor, they are able to recognize a broad range of cancer cell targets, eliminating the need for reengineering, unlike CAR T-cell therapies that require genetic modification to target cancer cells.[1]

In contrast to CAR T-cell treatments, which involve modifying a patient's T cells to produce chimeric antigen receptors (CARs) that recognize cancer cell antigens, lifileucel relies on naturally occurring TILs extracted directly from the tumor tissue. These TILs already recognize and target abnormal proteins or antigens on

the tumor. Although lifileucel's TILs are not genetically modified, the treatment involves steps to enhance their tumor-fighting capabilities.

During the manufacturing process, TILs are expanded with the help of IL-2. Before the infusion, patients undergo high-dose lymphodepleting chemotherapy, followed by multiple doses of IL-2 after receiving the TIL infusion.[1]

On February 16, 2024, the FDA granted approval to lifileucel for the treatment of adult patients with unresectable or metastatic melanoma. The approval was based on data from cohort II and cohort IV of the phase II C-144-01 trial.

This multicenter, global, open-label trial assessed lifileucel in patients who had previously received at least one systemic therapy, including a PD-1 blocking antibody, and, if they were BRAF V600 mutation-positive, a BRAF inhibitor with or without a MEK inhibitor.[1-3]

Lifileucel was administered after a lymphodepleting regimen consisting of cyclophosphamide and fludarabine, followed by IL-2 administration post-infusion to support the expansion of TILs. The median lifileucel dose was 21.1 × 10^9 viable cells, with patients receiving up to six doses of IL-2. The main endpoints of the study were the objective response rate (ORR) and duration of response (DoR).[1-3]

The C-144-01 trial demonstrated that lifileucel led to a significant response rate in patients with advanced melanoma. The pooled data from cohort II (n=66) and cohort IV (n=87) showed an ORR of 31.4%. Eight patients achieved a complete response (CR), and 40 patients had a partial response (PR).

The median time to the best response was 1.5 months, and six patients improved from PR to CR more than two years after treatment. Patients will be followed for five years post-treatment to monitor for recurrence or progression.[1-3] Safety data from the trial showed that all participants

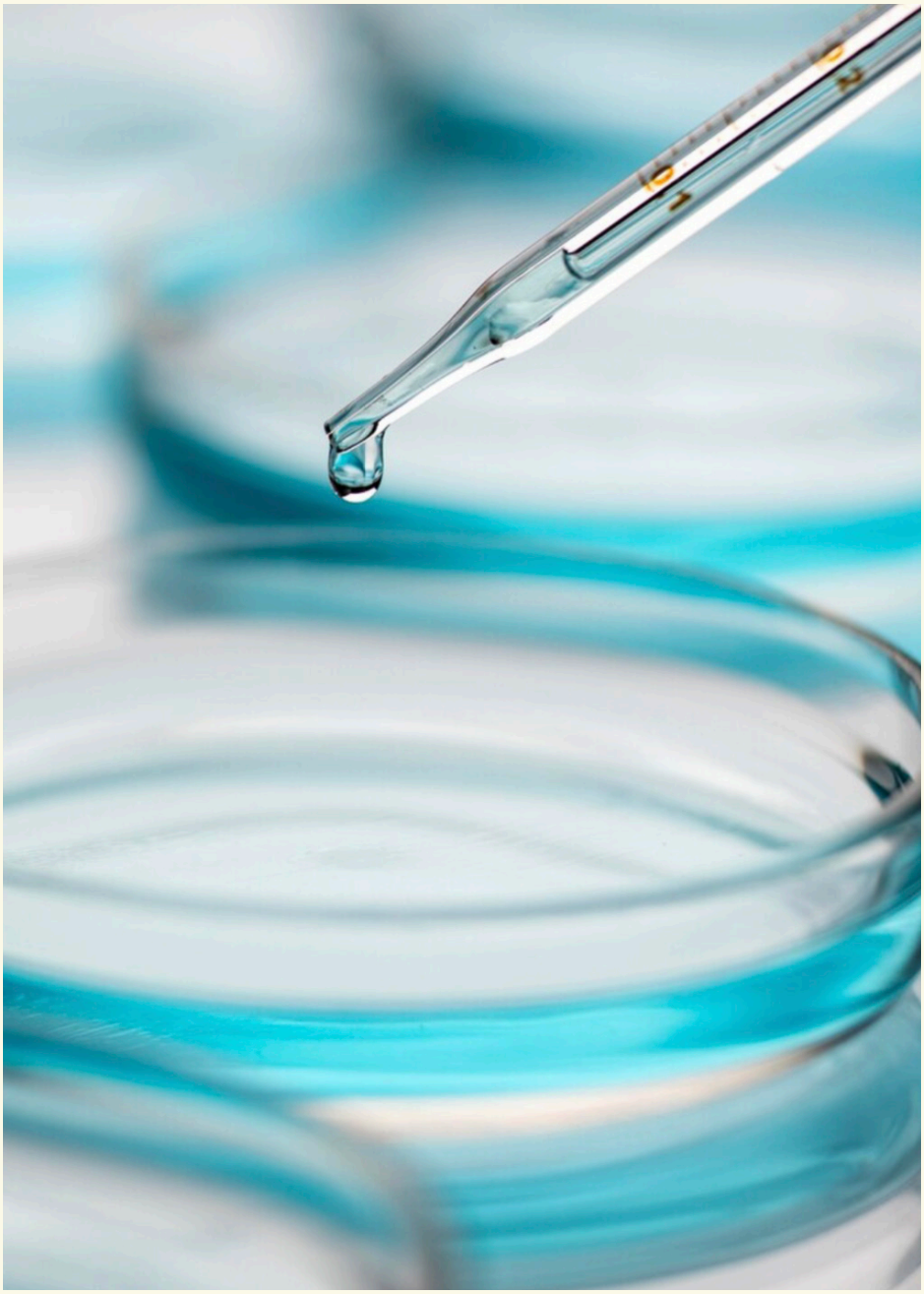


Photo credit: Freepik

experienced some side effects, most of which were not serious and were primarily attributed to the pre-infusion chemotherapy and the post-infusion IL-2 administration.

The most common adverse events included anemia, high fever, and significant drops in platelet and white blood cell counts.

Importantly, lifileucel did not cause the severe irAEs, such as cytokine release syndrome or neurological effects, that are often associated with CAR T-cell therapy.

The side effects observed were consistent with what is typically seen in such treatments.[1,3]

Looking ahead, the ongoing phase III TILVANCE-301 trial is evaluating the combination of lifileucel with pembrolizumab compared to pembrolizumab monotherapy in patients with unresectable metastatic melanoma. This trial's co-primary endpoints are ORR and progression-free survival, with secondary endpoints including overall survival, CR rate, DoR, event-free survival, and adverse event incidence.[1-3]

UPDATES FROM THE FOOD & DRUG ADMINISTRATION

FDA APPROVES CARVYKTI: FIRST BCMA-TARGETED THERAPY FOR EARLY RELAPSED OR REFRACTORY MULTIPLE MYELOMA

BY HV MEDICAL

The FDA has approved CARVYKTI®, the first and only B-cell maturation antigen (BCMA)-targeted therapy for patients with relapsed or refractory multiple myeloma (MM) who have received at least one prior line of therapy. MM is a clonal plasma cell proliferative disorder, relatively rare but associated with a poor prognosis, particularly in advanced stages. Lenalidomide, commonly used as a first-line treatment, is showing increasing resistance, creating a need for new therapies. CARVYKTI®, a chimeric antigen receptor T-cell (CAR-T) therapy, is designed to target BCMA-expressing cells, addressing this unmet need.[1-2]

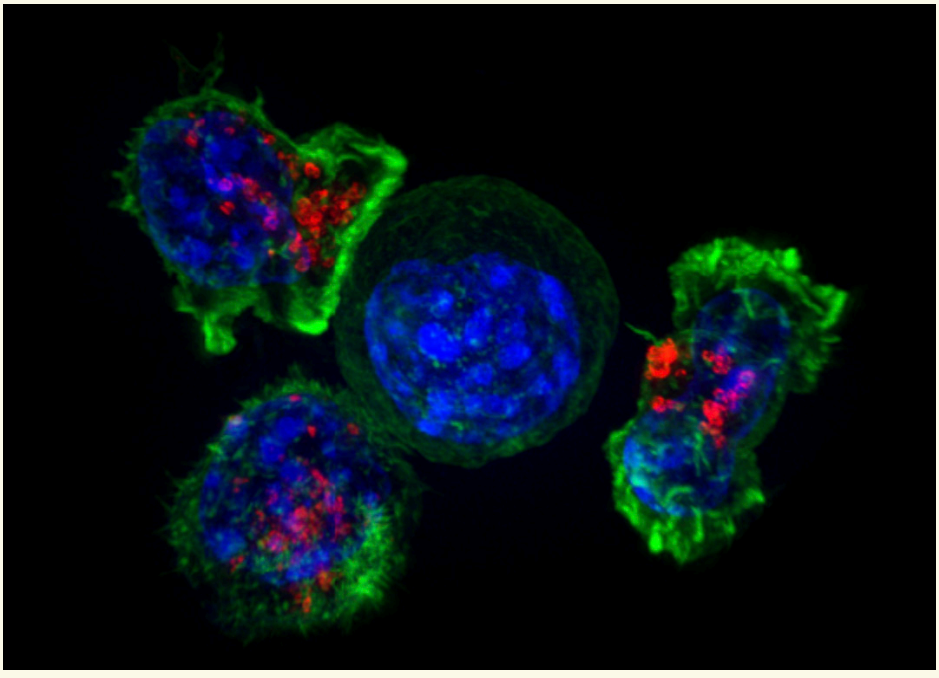


Photo credit: Killer T Cells Surround a Cancer Cell, National Cancer Institute

CARVYKTI® is an autologous immunotherapy that uses a patient's T cells, which are genetically engineered to express a CAR that targets BCMA, a protein overexpressed on malignant MM cells. This treatment was initially approved for patients with relapsed or refractory MM after four or more lines of therapy but now has approval for use after just one prior line. This recent approval is based on positive results from the phase 3 CARTITUDE-4 trial.[2,3] In the CARTITUDE-4 trial, CARVYKTI® was compared with standard-of-care therapies for lenalidomide-refractory MM. A total of 419 patients were randomized to either standard care (pomalidomide, bortezomib, dexamethasone, or daratumumab, pomalidomide, dexamethasone) or a single infusion of CARVYKTI®. The primary outcome was progression-free survival (PFS), with secondary outcomes including overall response rate, minimal residual disease (MRD) negativity, overall survival (OS), and adverse events.[3] CARVYKTI® showed superior efficacy, significantly reducing the risk of disease progression or death compared to standard therapy (hazard ratio, 0.26; P<0.001). After a median follow-up of 15.9 months, the median PFS was not reached in the CARVYKTI® group but was 11.8 months in the standard care group. The 12-month PFS was 75.9% for CARVYKTI® and 48.6% for standard care. More patients in the CARVYKTI® group achieved a complete response (73.1% vs. 21.8%) and MRD negativity (60.6% vs. 15.6%).[3] Adverse events were common, with 76.1% of CARVYKTI®-treated patients experiencing cytokine release syndrome, and a smaller percentage experiencing neurotoxicity or peripheral neuropathy. Despite these side effects, CARVYKTI® demonstrated clear benefits in lenalidomide-refractory patients.[3] This approval expands CARVYKTI®'s use to earlier stages of relapsed/refractory MM, offering a promising new option for patients. The CARTITUDE-4 trial's positive results highlight the potential of CARVYKTI® as a highly effective treatment for patients with MM who have experienced one to three prior lines of therapy.[2-3]

UPDATES FROM THE FOOD & DRUG ADMINISTRATION

FDA GRANTS FAST TRACK DESIGNATION TO BXCL701 FOR ADVANCED SMALL CELL NEUROENDOCRINE PROSTATE CANCER

BY HV MEDICAL

BXCL701 has received FDA Fast Track Designation for the treatment of metastatic small cell neuroendocrine prostate cancer, particularly in patients who have progressed on chemotherapy and show no evidence of microsatellite instability.

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Androgen-deprivation therapy (ADT) is the standard treatment for metastatic prostate cancer, but most cancer cells develop resistance, becoming castration-resistant (CR). Neuroendocrine-like cells further promote this resistance and cancer progression.

BXCL701 activates the innate immune system, enhancing cytotoxicity against cancer cells and improving the effects of immune checkpoint inhibitors (ICIs), such as pembrolizumab.

The combination of BXCL701 and pembrolizumab has demonstrated promising efficacy in patients with CR prostate cancer, including small cell neuroendocrine carcinoma and adenocarcinoma phenotypes.[1-6]

Prostate cancer is the most frequently diagnosed solid tumor in men and the second leading cause of cancer-related death in the United States. While localized prostate cancer has a favorable prognosis, high-risk prostate cancer, characterized by prostate-specific antigen (PSA) levels >20 ng/mL and Gleason scores ≥8, affects around 15% of patients and carries a five-year survival rate of only 30% in metastatic cases.

Most prostate cancers eventually become resistant to ADT, leading to the CR phenotype. Neuroendocrine-like prostate cancer cells, which comprise less than 5% of cases, play a key role in this resistance, and up to 60% of CR tumors express neuroendocrine biomarkers.

These cells support tumor survival

and progression, particularly during prolonged ADT.[1-3]

BXCL701 is a promising new therapy that targets neuroendocrine prostate cancer. It works by inhibiting dipeptidyl peptidase (DPP) and triggering the release of proinflammatory cytokines such as IL-18 and IL-1β, stimulating the innate immune system.

Neuroendocrine prostate cancers are typically immunologically "cold," meaning they have low tumor immunogenicity. BXCL701 helps stimulate an immune response, complementing the effects of ICIs like pembrolizumab.

Preclinical models have shown significant tumor responses with this combination.

The therapy is currently being evaluated in a Phase 2 trial for patients with CR prostate cancer with neuroendocrine carcinoma and adenocarcinoma phenotypes, and the results are highly promising.[5-7]

In the Phase 2 trial, BXCL701 combined with pembrolizumab was evaluated in 32 patients with metastatic CR prostate cancer, with small cell neuroendocrine carcinoma and adenocarcinoma phenotypes.

Most patients had previously received androgen-signaling inhibitors, platinum-based chemotherapy, or taxane chemotherapy.

The combination therapy demonstrated a 25% composite response rate and a 20% response rate based on RECIST v1.1 criteria. The median duration of response exceeded six months, and some patients also showed a reduction in circulating tumor cells and PSA levels.[8-10]

Regarding safety, 97% of patients experienced treatment-emergent adverse events (TEAEs), with 47% experiencing grade 3 events. No grade 4 events were reported. Common adverse effects included fatigue, hypotension, pruritus, dizziness, and nausea.

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Immune-related adverse events occurred in 41% of patients, with 7% experiencing grade 3 or higher events.

Treatment was discontinued in 18% of patients due to adverse events, with 18% of these discontinuations attributed to BXCL701 and 15% to pembrolizumab.[9-10]

In conclusion, BXCL701 has shown great potential in treating small cell neuroendocrine prostate cancer, particularly in combination with pembrolizumab. Its Fast Track Designation from the FDA highlights the importance of this new therapy in addressing an unmet medical need in patients with this aggressive cancer type.[4]

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EARLY DETECTION REIMAGINED

Breast cancer care revolution 9

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ONCOLOGY BREAKTHROUGHS

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14

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15

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International Kidney Cancer Symposium

Location:
Louisville, Kentucky

Date:
07 Nov 2024 - 09 Nov 2024

Cancer Indication:
Kidney Cancer

www.kidneycancer.org/ikcs

San Antonio Breast Cancer Symposium

Location:
San Antonio, Texas

Date:
10 Dec 2024 - 13 Dec 2024

Cancer Indication:
Breast Cancer

www.sabcs.org

ESMO Immuno - Oncology Congress 2024

Location:
Geneva, Switzerland

Date:
11 Dec 2024 - 13 Dec 2024

Cancer Indication:
General

www.esmo.org/meeting-calendar/esmo-immuno-oncology-congress-2024

ASH Annual Meeting and Exposition

Location:
San Diego, California

Date:
07 Dec 2024 - 10 Dec 2024

Cancer Indication:
Blood Cancers

www.shorturl.at/3lqwi

ASCO Gastrointestinal Cancers Symposium

Location:
San Francisco, California

Date:
23 Jan 2025 - 25 Jan 2025

Cancer Indication:
Gastrointestinal Cancers

www.shorturl.at/wUXuL

ASCO Genitourinary Cancers Symposium

Location:
San Francisco, California

Date:
13 Feb 2025 - 15 Feb 2025

Cancer Indication:
General

www.conferences.asco.org/gu/attend

INSIGHTS FOR Q3 2024

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selected practice-relevant publications for lung, renal, gastro-esophageal, melanoma, multiple myeloma, prostate cancer and triple-negative breast cancer

826 PRACTICE RELEVANT ARTICLES PUBLISHED

- 236 NSCLC
- 43 TNBC
- 99 RENAL CELL CARCINOMA
- 31 PROSTATE CANCER
- 139 ESOPHAGEAL & GASTRIC CANCER
- 29 MPM
- 109 MELANOMA
- 73 SCLC
- 67 MULTIPLE MYELOMA

410 ACTIVE USERS

TOP 3 FILTER CRITERIA:

- NSCLC 409
- MELANOMA 289
- RCC 280

*Total number of clicks on filter criteria over time

WEBSITE VISITORS	16,798
PAGEVIEWS	34,993
SESSIONS	19,214
AVG. SESSION	01:24
PAGES PER SESSION	1.82

VISITORS BY DEVICES

DEVICE CATEGORY	TOTAL VISITORS	PAGEVIEWS
Desktop	13,217	27,616
Mobile	3,289	6,884
Tablet	157	269

VISITORS BY GENDER

Total female	57.0%
Total male	43.0%

TOP 10 COUNTRIES WHERE VISITORS COME FROM:

COUNTRY	VISITORS	SESSIONS
1. United States	5,386	6,204
2. United Kingdom	3,463	3,607
3. India	1,059	1,277
4.Ireland	621	638
5. Germany	561	616
6. Switzerland	535	691
7. Italy	414	435
8. Poland	397	452
9. Netherlands	326	379
10. China	302	320

The number of Visitors represents all visitors to Oncology Compass, both registered and non-registered users. The metrics for Users relate to the Registered Users data who have full access to the Oncology Compass platform.

VISITORS BY AGE / GENDER

AGE	VISITORS	PAGEVIEWS
1. 25-34	339	421
2. 35-44	274	316
3. 18-24	206	254
4. 45-54	199	235
5. 65+	163	182
6. 55-64	141	164

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